

What Is Claimed Is:

- 5 1. An RFID comprising:
 an antenna for receiving power to drive a semiconductor
 circuit device and for transmitting and receiving signals; and
 first means for releasing a reset state of said
 semiconductor circuit device upon detection of a condition that
 a voltage attained by rectifying an AC wave induced on said
 antenna is higher than a predetermined voltage level;
 wherein, when said reset state is released, information
 10 can be transmitted from said antenna to an external apparatus
 according to signals which are generated in said semiconductor
 circuit device by controlling a state of impedance of said
 semiconductor circuit device, and
 wherein, in said reset state, said impedance is maintained
 15 at a low state.
2. An RFID according to claim 1,
 wherein a reset release voltage used by said first means
 is substantially equal to a logic working guarantee voltage of
 an IC being a part of said RFID.
- 20 3. An RFID according to claim 2,
 wherein, said reset release voltage is equal to a reset
 voltage applied after the start of logic working of the IC after
 releasing said reset state.
- 25 4. An RFID comprising:
 an antenna; and

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5 wherein, when said reset state is released, signal transmission from said antenna to an external apparatus can be performed according to signals which are generated in said semiconductor circuit device by controlling a state of impedance of said semiconductor circuit device,

state, and
wherein, in said reset state, said impedance is decreased
to a low state.

5. An RFID comprising:
an integrated circuit element having memory means, logic processing means, and power-on-reset means; and
an antenna for receiving power and signals from an external apparatus and for supplying said power and signals to said memory means and logic processing means;

6. An RFID comprising:

25 6. An RFID comprising:
an integrated circuit element having communication means,

a logic circuit and power-on-reset means; and
an antenna for receiving power and signals from an external
apparatus and for supplying said power and signals to said
communication means and logic circuit;

5 wherein, when a voltage applied to said power-on-reset
means is lower than a threshold level, impedance of said IC
device is maintained at a low state, and

wherein, when a reset state is released, signal
transmission from said antenna to said external apparatus is
10 performed according to signals which are generated in said
integrated circuit element by controlling a state of said
impedance of said integrated circuit element.

7. An RFID comprising:

an integrated circuit element having memory means, logic
15 processing means and power-on-reset means;

wherein, when a voltage applied to said power-on-reset
means is lower than a threshold level, impedance of said
integrated circuit element is maintained at a low state.

8. An RFID comprising:

an integrated circuit element having communication means,
20 a logic circuit and power-on-reset means;

wherein, when a voltage applied to said power-on reset
means is lower than a threshold level, impedance of said
integrated circuit element is maintained at a low state, and

25 wherein, when a rest state is released, signal

transmission to an external apparatus is performed according to signals which are generated in said integrated circuit element by controlling a state of said impedance of said integrated circuit element.

5 9. An RFID comprising:

an integrated circuit element having communication means, a logic circuit and power-on-reset means; and

an antenna for receiving power and signals from an external apparatus and for supplying said power and signals to said communication means and logic circuit;

10 wherein, when a voltage applied to said power-on-reset means is lower than a threshold level, impedance of said integrated circuit element is maintained at a low state, and

wherein, when a reset state is released, signal transmission from said antenna to said external apparatus is performed according to signals which are generated in said integrated circuit element by repeating an operation that a terminal of a load resistor whose another terminal is connected with a terminal of a coil of said antenna is connected to ground potential through a switching element and an operation that said terminal of said load resistor is disconnected from said ground potential by said switching element.

10. An RFID comprising:

an integrated circuit element having communication means, a logic circuit and power-on-reset means; and

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an antenna for receiving power and signals from an external apparatus and for supplying said power and signals to said communication means and logic circuit;

5 wherein, when a voltage applied to said power-on-reset means is lower than a threshold level, a terminal of a load resistor whose another terminal is connected with a terminal of a coil of said antenna is connected to ground potential through a switching element.

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